

TENNEY SERVICE

OCTOBER - 1915

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NEW
MOUNT KINEO HOUSE

SCENE OF
7th ANNUAL CONVENTION

N.E. SECTION

N.E.L.A.

TENNEY SERVICE

Vol. II Boston, Mass., October, 1915 No. 10

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THE SEVENTH ANNUAL CONVENTION OF THE NEW ENGLAND SECTION, N. E. L. A. AT KINEO

By Clifton R. Hayes, Manager,
Fitchburg Gas & Electric Light Co.

THE Convention of the N. E. Section of the N. E. L. A. at Kineo, Maine, on Lake Moosehead, will long remain indelibly imprinted on the minds of the delegates as one at once ideal in setting and much worth while as a whole.

to be appreciated and made the very most of.

The Tenney Companies were well represented both from the Executive Office and by the local plant managers.

Arriving Tuesday September 14th



President Gibbs addressing delegates to convention at out-door meeting at Kineo

The character of the papers presented dealing with present day problems served to bring new light on the subjects considered. The personnel of the attendance was exceptionally high in character. The opportunity to see and meet the important men in the industry under conditions so favorable is something

by special train, the delegates were taken care of by the Hotel Management in a manner that was pleasant indeed. There was no confusion whatever in handling the 400 convention guests and the accommodations were excellent. A part of the Tenney men and their wives were assigned to one of the cottages which was most

pleasantly situated at the water's edge. Several others enjoyed the sumptuous quarters usually assigned only to bridal guests, at \$300.00 per week.

The Convention sessions were well attended and all available time was taken up in a discussion of the papers presented.

revenue was discussed from every angle.

Co-operation with the contractor received attention and this problem shows signs of solution.

The great improvements in Mazda lamps during the past year with even greater improvements perhaps, to follow, was discussed particularly as



Tenney delegates and ladies—guests of Mr. and Mrs. Samuel A. York
From left to right—Messrs. Day, Baxter, Chase, Barnes, S. A. York,
Palmer York, West, Larrabee, Sands, Hayes, Gidney, Macomber,
Mrs. Schindler, Mrs. S. A. York, Mrs. C. R. Hayes, Mrs.
H. T. Sands, Mrs. H. A. Gidney

Power Day—Wednesday—was exceptionally interesting in that several officials of large isolated plants presented their views on "Why we do not get all the big power business."

A number of the State Commissioners were present at one session and exchanged views on a number of matters.

Electrical Prosperity Week and its importance to the industry was well put forth by Mr. Wakeman.

The Electric vehicle as a source of

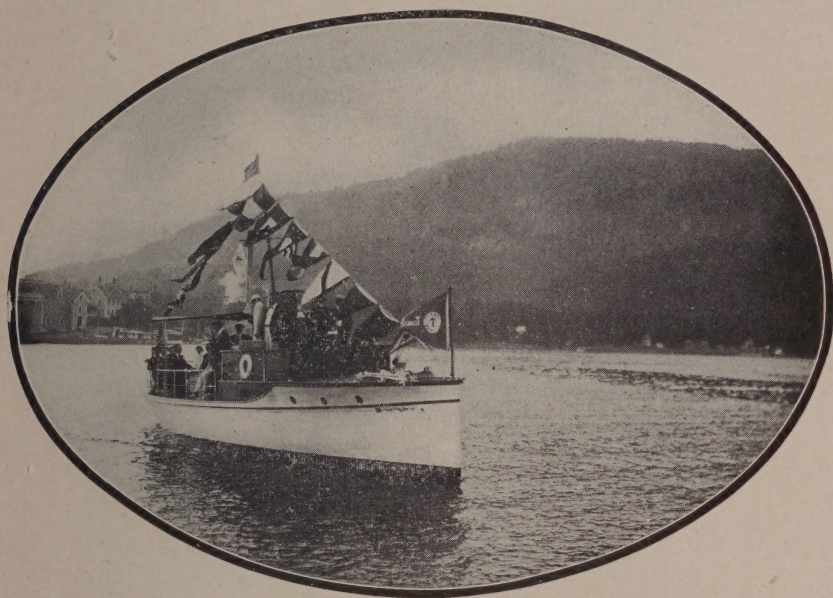
to the effect on the revenue of a company.

As to diversions, there was everything that could be wished for: golf, tennis, boating, fishing, walking, mountain climbing, and in the evening dancing.

The Tenney people enjoyed greatly the hospitality of Mr. and Mrs. S. A. York whose beautiful power yacht Larina enabled them all to obtain a better idea of the beauties of the lake and Mt. Kineo.

The following were in attendance at the Convention:—Mr. and Mrs. H. T. Sands Mr. and Mrs. H. A. Gidney, Mr. Palmer York, Mr. John West and Mr. Alexander Macomber from the executive office. Mr. and Mrs. C. R.

Hayes of Fitchburg, Mr. and Mrs. H. D. Larrabee of Montpelier, Mr. S. Fred. Smith of Salem, Mr. J. T. Day and Mr. Cyrus Barnes of Malden, Mr. H. D. Baxter of Exeter and Mr. L. J. Chase of Concord.



The Tenney party on board Mr. S. A. York's yacht "Larina"

WHY CENTRAL STATIONS DO NOT GET ALL THE BIG POWER BUSINESS

By John West, New Business Manager,
Charles H. Tenney & Co.

(Read before the Seventh Annual Convention, N. E. Section, N. E. L. A.)

CENTRAL Stations do not get all the big power business because of a number of economic reasons.

Central stations are not prepared to take on all the big power business now, and it is extremely doubtful, because of geographic, legal and financial problems, that our ideal of no power plants but our own will be realized in the present generation.

Such a condition would require the consolidation or combination of all central stations in such a manner that maximum use could be made of all investment and maximum economy of operation effected.

To take our subject in its literal sense is to premeditate a virtual monopoly.

How to get all of the profitable

power business in our territory at rates consistent with reliable economical service is a practical consideration, and although we cannot hope for a simple formula which will be universally applicable, there is much to be gained by an exchange of ideas relative to the sale of central station power service.

One of the principal mistakes which has been made by the central stations is the lack of frankness on the part of their representatives in dealing with large power consumers. All sales are the result of confidence between the buyer and seller, established only by consistent frankness. Central stations must recognize that there are certain competitive conditions of operation in manufacturing plants, such as utilization of waste product for fuel, exhaust steam heating, and useful life of isolated plant apparatus, which, under existing rates, cannot be overcome. There is only one thing to do in such cases, and that is to frankly explain the situation and thereby obtain the confidence of the prospect. The chances are that some future development of the plant will result in business for the central station.

Another mistake, which is not so prevalent at present, but which has in the past handicapped the sale of power by central stations, has been the lack of appreciation on the part of the central stations of the full value of central station power service. Because they have not until recent years appreciated the fact that central station power may be worth considerably more than power supplied from any other sources, many sales have naturally been made on the basis of rate per kilowatt hour alone. While this method may have been satisfactory for many specific cases, in that the business was obtained at a profit to the central station, broadly speaking, it has handicapped the sale of power to

many plants where the power requirements were favorable to the operation of an isolated plant.

Although central station power may be installed for a minimum investment; although its reliability is preeminent; although the application of motors is most flexible; and although money invested in isolated power plants can usually be invested at a greater profit elsewhere; rarely, if ever, is the estimated value of such items given due consideration or included in the comparative cost sheet upon which the prospective power user bases his judgment, and so the central stations have been called upon to supply a product of better quality than their competitors, at equal or lower comparative costs.

This condition is obviously an unfair one and the remedy would seem to be a concerted effort on the part of all central stations to consistently emphasize in their advertising and in their solicitation the true value of central station power service. The manufacturer should be interested in economy and not in cheapness. True power economy is a ratio as represented by the total cost of power, heat and light and the gross valuation of the product manufactured. Responsibility for driving this fact home rests with the central station.

Still another mistake made by central stations in soliciting large power business has been the broad general statements made by representatives that electric power service will save money for the manufacturer. Such statements should not be made until all conditions under which the service is to be used are definitely known. The manufacturer may be interested in saving money, but he will be far more interested if a method can be shown him for making a larger amount of money without increasing his costs.

And finally, a number of central stations have made the mistake of

doing nothing whatever to promote the sale of electric power, but rather have depended upon the indirect results which naturally accrued from the work done by other central stations that have been alert and working steadily to obtain profitable power loads.

The question of power rates is and will continue to be discussed with all the interest which its importance demands, but it may be generally said that in New England, at least, the rates for service are sufficiently low to obtain the business in competition with isolated plants.

The average manufacturer depends upon the central station to explain the diversity between rates offered in different localities. In the sale of electric power, quite frequently some other company's rates (lower for the particular class of business) are quoted. It is therefore important that the central station representative be well versed in the reasons which make the difference in rate schedules imperative.

It is well to remember that, while rates are most important to the central station because our revenues are obtained on the basis of our rate schedules, they are not of primary importance to the manufacturer, for his profits and revenues are obtained from the sale of his product, and the important consideration to the manufacturer does not consist in any one rate schedule but in a combination of rate schedules resulting in his total cost for power, light and heat.

The growth of central station power service has been remarkable, and this growth certifies the soundness of central station power service at existing rates.

It occurs to the writer that, while the larger central stations and plants under syndicate management can afford to, and do make considerable expenditures to obtain the large

power business in their territory, the independent central station is somewhat handicapped by the necessary expense involved in power investigations. Inasmuch as accuracy in the matter of power cost is essential to successful promotion of the business, and as the territories of the large central stations and syndicate managed plants, and the independent central stations are not open to competition, there would seem to be an opportunity, through the New England Section of this Association, for the establishment of a central station power bureau on some co-operative basis. The functions of such a bureau would be to distribute information in regard to power business obtained and the methods used in solving the problems of competition; to obtain data on the cost of operation of private plants; and to render estimates on the cost of central station power service for all central stations which are members of this Association.

The sale of large amounts of power is a specialty in itself, and the value of such a bureau under the direction of the New England Section would undoubtedly more than compensate for the nominal expense equitably distributed over the New England States.

Such an arrangement would enable the smaller central stations, at nominal cost, to have the best selling service for large power installations, thereby diminishing the chances of erroneous estimates, resulting in dissatisfied consumers, and hampering the general development of big power business.

Such a bureau would undoubtedly be established should one operating company control all of the stations in New England. Would it not be practicable, inasmuch as no competition exists between central stations for the business, to establish such a bureau?

ECHOES FROM THE PLATTSBURG MILITARY TRAINING CAMP

By Herbert A. Gidney, Auditor,
Charles H. Tenney & Co.

SO MUCH has been published in the papers in regard to the Military Training Camp at Plattsburg, New York, that it is difficult to know just what to say that will be interesting and not a repetition of what has already been so well told. I will, however, endeavor to

committee which was organizing this camp and the spirit of the times together with a sense of duty resulted in interesting just the sort of men the government desired for its training camp. At any rate, there was gathered together at Plattsburg, New York, on August 10th, a homo-



Prominent public service men at the Plattsburg Camp

Top row—left to right, E. B. Nye, P. L. Spaulding, R. W. Sherwin, H. A. Gidney

Lower row—left to right, A. B. Tenney, E. F. Sidley, W. A. Gifford, R. S. Hale, C. D. Robison

give you a brief outline of our experiences at the camp from a personal point of view. It is remarkable that so many men from so many classes of life should have become sufficiently interested in this movement to have given up four continuous weeks of their time, which meant not only absence from business—but absence from family and sacrifice of all their normal activities.

No doubt the personnel of the

geneous body of nearly eighteen hundred men united in a strong common interest in what is to be known officially and permanently as "The First Training Regiment." These men came from nearly all sections of the country as evidenced by the following: New York, 491; New Jersey, 55; New England 310; Pennsylvania, 133; Maryland, 62; West, 47; South, 11; Washington, 13; miscellaneous, 4.

The enthusiasm with which the men got into line, so to speak, was remarkable and it did not take very long for the officers in charge of the camp to complete the assignments and distribution of equipment and ordnance, so that real earnest work was begun in the afternoon of our arrival.

Those who had come equipped with golf sticks, tennis racquets and evening clothes, if there were any,

once and if you did not grasp what was said it was necessary for you to hustle around and inquire from some one who knew.

Everything supplied by the government was clean and new and up-to-date. The food was plain but substantial, the camp was dry and free of mosquitoes and on the shore of Lake Champlain where good bathing was possible. The officers in charge were the very best obtainable with



"Right dress!"

quickly learned that this was to be a camp of business, the business of learning to be a soldier and that there was to be no time for play.

Everyone entered into the work with enthusiasm and a resolution that they would get the most there was out of it and relieve the officers of the duty of discipline so that they could devote their entire time to teaching us the rudiments of the military game. The closest attention was required as the various phases of the work were covered but

long experience and the relations between the officers and the attendants when on duty were the same as those between the regulars and the officers, but while off duty were those of one gentleman with another. The tact and patience with which the officers labored with the so-called "rookies" was remarkable and all through the camp there was generally the very best of feeling.

The first week of the camp was taken up with the school of soldier and the school of the squad and from

6 o'clock in the morning when we were assembled together for roll call and setting-up drills until 7.30 p.m. at night when our lectures were completed, we were as busy as could be.

The degree with which the government has standardized everything that you shall use, say and do is most extraordinary. Everything is down in writing with illustrations, so that each officer will train his men in exactly the same manner in order that the various units when brought together into a regiment will work together as one large unit responding to the command of the officer in charge.

The first week was taken up with instructions as to the proper use of equipment and ordnance and in the manual of arms and close order drill and it did not take long before we became accustomed to the routine, each day the procedure and the routine in regard to instruction being different than the day before. At no time did the work become monotonous. Each one looked forward to the next day with the greatest interest.

After the men had become accustomed to the use of the arms and had been taught how to use them, each company in turn was taken to the range and given target practice, which was later followed by actual record shooting. The general average obtained by each company was very high, considering that most of the men had not done any shooting before. The total number of points possible was 250, consisting of 50 points from 10 shots at various distances, ranging from 200 to 600 yards, slow or rapid fire. Those who shot at least 160 were entitled to the rating of "marksmen," those who shot at least 190 to the rating of "Sharpshooter" and those shooting 210 or more were entitled to the rating of "expert." I have not the

data at hand to show just how many obtained "expert," but in H Company alone there were 10, and it is safe to say that that is a fair average.

With the shooting completed, the preliminary work for the "hike" was begun and we began to receive instruction as to the use of the pack which we were to carry and in extended order drill. We were taken out on the road for short marches during which we would be extended out into long lines and taught how to advance on an assumed enemy. As each day progressed we were given a little more to carry until we gradually became accustomed to the full weight which we were to carry.

For the march the pack of each man contained: One blanket, one comb, one set of underwear, one poncho, one cake of soap, two pairs of stockings, one towel, one shelter tent half and pole, one shelter tent rope, five shelter tent pins and toilet articles.

The following was also carried: knife, fork, spoon, meat can, bacon can, condiment can, haversack, rifle, bayonet, belt, canteen, cup, blank ammunition.

In addition to this equipment the men were allowed to have two extra blankets which were rolled up into a squad roll of sixteen blankets. They were also allowed to carry a surplus kit, consisting of: One pair of breeches, one set of underwear, one shirt, one pair of shoe laces, two pairs of stockings, one sweater and toilet articles.

These squad kits had to be rolled very tightly to go into a bag of a prescribed size and any man carrying more than he was entitled to had to make peace with the other members of his squad, and it was not unusual to see the men re-rolling their surplus kit, or even discarding some of the articles which they started out with.

The infantry branch of instruction

occupied the entire morning, but in the afternoon the men were allowed to chose the particular line of advanced work they desired to take up, consisting of engineering involving map making and reading, trench work, bridge construction, etc., cavalry, artillery, machine guns, signaling and other special branches. Those who did not like to take any of these were kept busy with special work on target practice, or branches of various kinds so that any one

The so-called "hike" which consisted of as near war conditions as possible without the destruction of property and life, was probably the most practical instruction that the men attending this camp got in the way of acquiring real knowledge of what to do in meeting an enemy. We were all subjected to exactly the same conditions that the regulars experience, with possibly two exceptions, namely, we were not obliged to cook food or perform cer-



Making beds at Plattsburg

thinking that they might find a little leisure time by side-stepping the elective work were disappointed.

The attendance at the lectures in the evening was generally compulsory, but the lectures were so very interesting that every one was glad to be there. As a rule, lectures began at 6.45 p.m. and were completed at 7.30 p.m. and covered subjects such as "First Aid," "History of Small Arms," "Explosives," "Artillery," and, as you all know one evening we listened to Theodore Roosevelt. Commont on his talk is unnecessary.

tain other duties about the camp and we were not paid for what we were doing.

The first day consisted of marching several miles to a camp site which had been selected by the officers. This proved, however, to be wet and unsanitary, so that General Wood ordered the camp moved and without any warning to the camp the bugle call sounded — which meant "Pack up and move." It being our first camp and having labored for some time to get nicely settled, you can imagine our dismay, inasmuch as we had walked many

miles. We were quite troubled to learn that we had to load up with what seemed to us at that time to be a heavy weight on our backs and to start out we knew not where. Many of the boys had purchased hay and fixed up nice beds in their so-called "pup" tents and only to abandon them to the farmers from whom the hay was purchased. This move, however, was not displeasing to the farmers who quickly gathered the hay and followed us along the road where we camped again and re-sold the hay at additional profit. However, the new camp which was only a few miles on was so much better than the first one that we were all glad that the change was made.

The next morning we were up bright and early shortly after sunrise, and after breakfast broke camp and were on our way. From then on things began to be more interesting and each day we were given a special problem to work out. The First Training Regiment was known as the "Blues" and several regiments of regulars, including cavalry, opposed us and were known as the "Reds." We were each given fifteen rounds of blank cartridges and our lines were spread out along several roads so as to prevent the enemy (who was supposed to be invading the country from Canada) from getting around or through the lines. The details of the several "battles" have been so fully described in the papers that I will not take up the time to go into these now, except to say that they were very interesting and—in fact—exciting at times and furnished a great deal of amusement and interest to the townspeople in the several towns through which we went. Every effort was made, however, to get outside of the towns and on grounds where no real damage could occur to the orchards and crops. Umpires were scattered about on both sides

and observed every proceeding and determined just when you could advance under fire and the results of your efforts.

Most of the marches were on side roads which were very dirty and hot and often we walked ten miles or more through four inches of dust with horses galloping by every few minutes and, loaded down as we were, you can easily imagine that we were a very tired and dusty lot when we finally received the recall and made way for the camp which had been selected for us.

Some of the nights we were fortunate to have a good place to bathe in and with a good meal awaiting us that was all the men asked, but other nights we were not so fortunate and many times had to bathe in little muddy streams below the places where the cooking water was taken and the section allotted to the horses.

On the "hike" the food was not quite as good as at the camp, but considering the facilities that the cooks had and the difficulty of getting food to the camp it was good. At least it tasted very good after a hard day's work.

Altogether we marched about ten days and covered, I think, nearly eighty miles on the road, which, together with the skirmishing, probably would bring it up to nearly ninety or one hundred miles.

We started out on the "hike" on Friday and returned a week from the following Sunday. To get back to the camp Saturday morning we were obliged to get up before sunrise (a little after 4 o'clock) and march in nearly ten miles over a hard macadamized road and this was probably the hardest march that we made. Upon our arrival at the camp we were reviewed by General Wood's staff and were then marched to the camp. It was then a case of hustle—hustle—to get the property

of the government in shape to be turned in, but everything was done so systematically that it was not long before we had accounted for everything given us and received our discharge. We were then free to chose our own way of getting back home.

Without a doubt camps of this kind are very practical and necessary and if every man, physically and mentally fit, will only interest himself in this movement and attend one of these camps, if possible, he will take a very important step towards preventing the United States from being involved in any war with a great foreign country. This country is not prepared now to back up its own representatives in their endeavors to keep peace and this camp served to show that it would be difficult to train a large force of men in a short space of time. It was also very apparent that the regular army officer could not alone organize and train a large army of a million men or more and would be forced to rely on

junior officers who had received a training similar to that given at camps of this kind. This camp is only one of many that will be held in the future and a permanent committee of thirty-five has been appointed as the result of the following resolutions:

"Resolved: That the members of this camp hereby form an organization for the purpose of encouraging a system of military training camps throughout the nation and of assisting to provide a reasonable amount of military training for the citizens of the United States.

"Resolved: That the chairman shall appoint a committee of eight, one from each company, who shall increase their number to 35 from the members of the camp, with due regard for representation of all sections of the country. The committee of 35, in co-operation with representatives of other similar camps, shall prepare and submit a permanent plan of organization and action."



IMPRESSIONS OF THE CAMP OF MILITARY INSTRUCTION AT PLATTSBURG, N. Y.

By C. E. Paige, Manager,
Malden & Melrose Gas Light Co.

THE series of events which led to the establishment of a military camp for the instruction of business men in this country needs no explanation and is not the purpose of this article.

That the nation-wide interest in military matters and especially in

formed men shows how uncertain the future may be, as far as a possible attempt at invasion of this country by an enemy is concerned.

There are many who have been rather inclined to view the situation with equanimity feeling that our coast defenses are entirely ade-



At the Rifle Range

this camp of instruction are intensified greatly by the European war is unquestioned.

Probably no person having the welfare of himself and his country in mind has failed to consider what may happen at the conclusion of the present conflict.

The possibility of an invasion of this country is discussed repeatedly. The very fact that there is so much discussion on the part of well in-

adequate and even if our standing army is not so well equipped in point of numbers as the armies of other nations, we would have no trouble in mobilizing an army of sufficient strength and well enough trained to defend any part of our coast line or frontier from attack.

There are also thousands of people who believe our present defenses are so inadequate as to be practically useless so far as the preven-

tion of invasion by an enemy is concerned.

I attempt in no way to say which side in the argument is correct.

The men who have taken a course in the military camp at Plattsburg, or who have had any military experience know that an attempt to "organize and equip a million men overnight" is so futile a dream, as to be dismissed immediately from mind as a serious consideration. Opinions differ as to how much time it would take the ordinary man enlisting as a private in the United States

have paid money to learn at first hand a little about military organization and discipline.

There is much also to be learned about what our military resources are and what our military policy stands for.

Many people who have not been called out at 4 o'clock on a rainy morning have expressed the opinion that a four weeks' camping trip was a jolly good outing.

I have yet to meet anyone who came to this camp or the preceding one with this idea.



At the left, F. L. Ball. at right, C. E. Paige

Regular Army to get the instruction given to business men in four weeks' time in such an encampment as this. It is placed between five and ten months.

This may sound unreasonable at first, but it is to be borne in mind that only extremely well trained men in the military profession are used as instructors.

Moreover the same lessons are never gone over again in review, there isn't time, and the personnel of the camp is made up of men who

Certainly if one did come with this idea he received a rather rude awakening for the summing up of each day's activity may be expressed in the one word,—Work.

On our arrival we found that the tents used by the preceding camp had been left in position on the same camp site.

This site is located on the shore of Lake Champlain about two miles south of the City of Plattsburg.

Standing at assembly in the company streets the "rookies" may look

across the waters of Lake Champlain to the Green Mountains of Vermont just north of Burlington.

The incoming men were taken in charge by various camp officials and business men remaining from the earlier camp.

They were assigned to their companies and to temporary quarters, in the particular "street" of the company to which they were to be attached.

particular. If any man thought he could drill when he was so disposed, or do other work when he pleased the camp was no place for him and if he was not willing to do his part, he might just as well leave at once because he would soon be made to leave.

Soon after this informal talk we were summoned to "mess."

Instead of finding "army beef" and "pork and beans," as some of



Telescoping tents

A soldier's equipment was issued to each man, whereupon he was ready to settle down for a month to the business of being a soldier.

The first realization that you are under military discipline comes immediately after arrival.

The captain as company commander calls his group together, and impresses them with the fact that work must be done, discipline maintained, teamwork must be developed and in short everyone must be prepared to "play the game," in every

us half expected, we found a most excellent meal of plain, substantial food. At each succeeding meal we have found food of quality and variety sufficient to satisfy the most exacting. It is true that the tables are covered with oil cloth, that we use agate-ware dishes and that we sit on wooden benches instead of chairs, but if anyone would complain at such trivial discomforts he should breakfast at 6 a.m. and drill all the forenoon with a 35-pound pack on his back. He will then eat almost

anything served in almost any manner and be mighty glad to get it.

We had no sooner returned to our tents, than we were again assembled for physical examination. The men form in line and pass in single file past the "medico," who is permanently located at the camp. He looks the prospective soldier over carefully, but with surprising thoroughness. He examines particularly the feet, the eyes and the heart.

In the army all medical treatment

A careful record is kept of all the equipment issued to each soldier by the government. At the end of his term of service he must turn it all in or pay for the missing articles.

Every article issued is enumerated in great detail and it was in the study of this equipment that we got the first impression of the marvelous ingenuity of military science in preparing soldiers for the service.

It is practically impossible to conceive of anything which a soldier



Squad 10, Co. I, C. E. Paige second from left kneeling

is based on prophylactic or preventive treatment. It is assumed that the average soldier is an able bodied man at the outset, and all efforts are bent rather on keeping him well than curing his illness. If one should occasion to require the services of a physician he may do so by "falling-in" at sick call, which comes twice a day.

Great care is exercised to keep all soldiers in the best possible condition, and one is expected to call for treatment even for slight scratches or blisters on the feet.

may need that has not been provided. In fact many of these articles may be used for a number of purposes, for instance, the poncho may one day serve for a blanket, the next for a sleeping bag and again for protection from the rain.

It is generally admitted that the "pack" (which supersedes the knapsack) used by the United States Army is the most efficient in the world.

Along with the equipment given to the soldier for his material comfort and well being is the ordnance

outfit. Naturally the most important items are the rifle and bayonet.

At present the army uses the Springfield rifle, model of 1903. Most of you will be surprised to learn that this is the most effective gun ever devised.

There are some types which carry greater distances, and perhaps others which shoot more accurately, but none combine these two great essentials to such a degree as this type.

Now to speak briefly of the training.

The most surprising impression one receives is the simplicity with which everything is done—after you know how.

The movements of the body, the arms and legs, the carriage of the head and all such details have been studied and improved upon for years until to us as laymen it seems perfection has been almost attained.

All efforts are bent to the elimination of lost or waste motion so that the soldier may do his work with the least possible expenditure of energy—he may need all he has for other things.

The bugle sounds at 5.45 a.m. daily. At 5.55 when the Reveille is sounded every soldier is expected to be fully dressed and in the company street ready for “assembly.”

The company is formed in a double line, (in this case facing easterly) and is always “dressed” on the right.

Each company is divided up into squads of eight men each. For each squad is a squad leader or corporal.

At a given command each corporal salutes in turn and reports his squad present or names the absentees.

This form of roll call is given frequently during the day and each corporal is required to confirm all his reports in writing, giving the excuses of the absentees.

From 6 to 6.20 calisthenic exercises are given to the entire company.

The company is again assembled at 6.30 and marched to the mess tent or shack for breakfast.

After breakfast you have as much as 20 minutes in which to do anything you wish, always bearing in mind that the beds must be made up, the tent policed and occasionally the tent telescoped, for ventilation. From then until 10 or 10.30 the company is drilled either in marching or the manual of arms.

As variations we may take lessons in battle line formations, trench digging, tent erecting, target practice or any one of the multitude of features of military science.

There is usually a rest of a few minutes about 10.30 no matter where we are or what we are doing.

At this particular camp we have with us Captain Keeler, who has had charge of physical instruction at West Point for more than 30 years.

Usually we spend a half or three-quarters of an hour with him, going through exercises or learning how to carry ourselves as soldiers. At 11.55 we again fall in for “mess.”

The early part of the afternoon is given over, in this case, to special instructions in various of the highly specialized activities of the army, infantry, cavalry, artillery, signal corps, engineering, etc.

Actual work is done in these classes just as if the class were a unit in case of war.

At 4.45 all companies assemble for retreat. “Colors” are sounded, the band plays “The Star Spangled Banner” and all companies and temporarily unattached soldiers stand at “Attention” while the flag is lowered.

In the evening lectures are given to the entire encampment assembled out-of-doors, usually around a camp fire.

Very interesting subjects are taken up, such as Sanitation and Health Preservation by Captain Darby, the

physician; Defenses and Fortifications by Captain Black of the Engineering Corps.

Other evenings have been given over to lectures on Artillery, Cavalry, Coast Defenses, First Aid, Signalling and Army Organization.

Thus far we have experienced only camp life. We know that our experiences on the "hike" will open another book of experiences.

But even now we begin to realize how little we know about this all important subject.

It is essential that we should know more about it. Whether or not we as voting people decide that larger appropriations are or are not needed for increasing our Army and Navy, we may at least be helped and may help others to a decision by the experience and knowledge which we are now acquiring.

VACATION SEASON

By H. P. Knowlton, Chief Clerk,
Malden & Melrose Gas Light Co.

AS WITH other coworkers in our midst, the accounting employees look forward to that time during the year when mind may be relaxed and body renewed.

The season being now spent, we start again for a year's work to maintain our system of accounts in such condition that will meet just approval of auditor's inspection.

At the beginning of this summer, our department was especially busy. Amongst its activities may be mentioned the transfer of over 10,000 regular customers' accounts to new ledger cards capable of carrying such for a period of four years. Also, on these records are carried the consumers' deposit accounts. Since these have been carried, the deposit ledger consisting of duplicate receipt forms of deposit to customers has been balanced with the bookkeeper's card record, and proven with the voucher record balance. Recently our bookkeeper's prepayment ledger card system of customer's accounts has been discontinued

and balances of such accounts are carried only on the meter readers' prepayment record slip. We are working also on a readjustment of our card record system of meters so that such will be filed geographically instead of by consecutive numbers.

During this summer season, many of our customers are away which results in many instances of a call from our collector. Overdue accounts are some times the result of oversight, some times lack of ready funds and occasionally of refusal to pay owing to an alleged error. In the first instance, our collector can procure payment at once, in the second, an extension of time is granted if circumstances of credit warrant, and in the last, such explanation of the completed order is made as the case requires for settlement.

Starting on our fall work, we hope the increase in customers on our company's records will equal that of the year just ended, nearly 2,000.



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EDITORIALS

Levin J. Chase, Contributing Editor

KEEP MOVING

SELF-SATISFACTION is a dangerous mental condition and frequently leads to disaster. It is during the period of self-satisfaction that we relax our efforts and our competitors forge ahead.

Life is a battle and eternal vigilance is the price of progress and success. Whatever position we may have attained in the world of business it was the result of effort, and in these intensive days continued effort is necessary to hold it. It is a delusion to suppose that we are secure on the rung of the ladder that we have reached, even if we have a good footing. Long experience has demonstrated that the best way to hold our present altitude is to continually reach higher.

Life is a continual contest of wits and there is another man ready to fill your position. He may have all your good qualities and others that you lack. It is more than likely that he is your equal in intelligence and your superior in energy and ambition.

Consequently it is vital to our welfare that we should ever be on guard against over-confidence. We should ever be on our guard against carelessness and indolence. We should keep up an incessant self-inspection and when we find a weak place, strengthen it with the best material at hand.

The importance of these considerations is becoming more and more apparent in the present-day development of business. The public demands greater efficiency and a higher grade of service from public utilities and utilities are obliged to look for greater efficiency from those whom they employ. In all forms of production and distribution, better quality is required. No man can afford to be satisfied and stand still, because the business that stands still is soon out of the race.

The modern employer is looking not only for the man who knows but the man who does.

ELECTRIC POWER AND THE HEATING PROBLEM

AT THE recent convention of the New England section of N. E. L. A. Mr. Gillespie of the United Shoe Machinery Co., read a paper that was received with unusual interest and general approbation.

It was a good paper for many reasons, but particularly because he handled a vital subject in a way that provided thought and discussion. It was illuminating to his audience because he dealt with only one side of the question and it is always valuable to get the other fellow's point of view, especially one who is known to be an honest opponent of central station power. The paper possessed an additional interest because its author is one of the high priests of modern efficiency.

Mr. Gillespie prefaced his paper with an eloquent eulogium of his own company, which he characterized as the most efficient organization on the face of the earth except the Roman Catholic Church. We do not question the accuracy of that statement, although the comparison loses force when we consider that the Roman Catholic Church is subject to competition.

It is not our purpose to review this paper at length, but it seems entirely fitting to consider two of its salient features.

The gentleman stated that when a central station sought to supply a factory with electric power it should assume the heating problem. That is an interesting suggestion, but by no means conclusive. The heating of factories is not, as yet, one of the legitimate functions of the central station, but we have never known a central station man who would not spend time and money to solve the heating problem of a prospective power customer.

Another point emphasized by the

gentleman was service. He said, in effect, that the central station should keep ever in mind that it was furnishing service—not only electric service, but personal service.

To most, if not all, of his auditors that idea was rudimentary. It is the life-blood of our business and, if there is a central station man responsible for the public policy of his company, who does not do service, talk service, think service and dream service, we have yet to meet him.

THE DINNER WE HAVE AT HOME

WE recently attended a convention that was held at an ultra-fashionable and expensive summer hotel. The food provided was the best that money could buy and the service was above reproach, indeed the culinary department was managed with a keen eye to the comfort and physical rapture of those who worship food.

But strange as it may seem this elaborate and opulent food soon killed the appetite of the plain citizen, who generally eats at home and after the first day he approached his meals as he would the dentist's chair. At first he was unable to understand his aversion to the royal viands that were set before him by maidens skilled in the art of dining room attendance and it was not until he returned to his own hearthstone that he solved the mystery.

Let us picture the return of the plain citizen. For the sake of realism we will describe his home as a cottage with lots of vines around it and a back yard filled with all the kindly fruits of the earth. There is an ice card in the window and the evening paper reposes on the piazza steps.

The hallowed precincts smile as he draws near and dogs (no real

home is without them) bay a deep-voiced welcome.

And there is a delicious odor in the air and a sizzling sound that suggests real cooking and something good to eat. He enters with a huge sigh of satisfaction. The kitchen door bursts open and—but why enter into details. Every man with a home and a good wife knows what happens and why give unnecessary pain to those who dwell in single misery!

Presently his wife returns to the kitchen and a little later the dining room table fairly smiles with food, real food, home-cooked food, the kind that blesses those who cook and those who eat. There is everything in the way of comestibles that a hungry man could wish unless he belongs in a sty.

And the cook sits down at the table, for she is no hireling wench, but the goddess of the home. Her cheeks are rosy and there is a happy gleam in her eyes as she watches her consort soothe the pangs of hunger. He pauses, ever and anon, to better enjoy the sensation of eating at home and he thinks with horror of creamed gosling, squab a la sacre, broiled live loon a la moosehead and other appetite destroyers that burden the tables of the rich.

The plain citizen is contented for he is eating dinner at home. "Better a dinner of herbs," saith the scriptures, "where love is, than the stalled ox and hatred therewith." Better a dish of ham and eggs at home than lamb chops a la cholera at a summer resort.

The plain citizen is wise in his generation. He has tasted of the flesh pots of the mighty, he has in-

dulged in the nectars and ambrosias that tickle perverted palates and having wandered after false gods and suffered mightily he is able to assess foods at their true value. And so he celebrates with timbrel and with song one of the most perfect of all earthly delights—the dinner at home.

RELIABILITY AN EMPLOYEE in any business is capitalized; that is, his employer gives him a certain compensation which represents the interest on a definite financial investment.

It is not generally realized that when an employer pays an employee \$100 a month, he is giving him the equivalent of 6 per cent on \$20,000.

For this very definite and appreciable consideration the employer expects the exercise of certain knowledge and abilities together with the fundamental qualities of loyalty and industry.

Among the services which the employee, by virtue of his contract of employment, agrees to perform, there is no more important duty than reliability.

Reliability is not an incidental trait that may or may not be shown, for that is what the employee promised to supply and is the principal thing for which he is paid.

In other words reliability is an indispensable requirement, the rendering of which entitles the employee to no particular praise as it is not, in this sense, a virtue but a solemn duty that by the terms of his contract, written or unwritten, he is bound to perform.

IN MEMORIAM

ISRAEL H. STERNBERG

IT IS with deep regret we announce the death of our friend and fellow worker, Israel H. Sternberg, better known to all his friends and acquaintances as "Sterny."

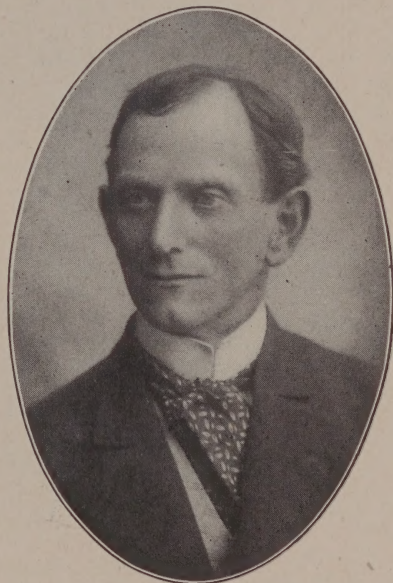
On March 24th he left to undergo a serious operation followed a few weeks later by another. His illness was such that he was practically incurable and defied all human efforts.

He had been associated with this company about six years, first as storekeeper and finally as foreman of the gas main department, which position he held at the time of his death. He was a native of Bellefont, Pennsylvania, and in his early manhood he was employed at the U. S. Printing Office in Washington, D. C., later on the editorial staff of the Lowell Daily News, which position he held for ten years, and prior to his coming to Revere he was claim agent for the Southern New Hampshire Railroad with headquarters at Haverhill.

He was a born comedian and exerted himself to make others forget their troubles and be happy, and that he succeeded will be eloquently testified to by all his friends.

Funeral services were held at his late home, 436 Revere Beach Parkway on Thursday morning followed with solemn requiem high mass at the Immaculate Conception Church of Revere. Forty members of the Suburban Gas & Electric Club escorted the body from the house to the church. The pall bearers were Charles F. Perry, Richard Smith, A. F. Gardella, James Mann, Charles McCarthy and John Macaulay of the

Suburban Gas & Electric Club. After the services at Revere the body was taken to Lowell for burial. As a mark of respect to the deceased the office and all departments were closed until 1 p.m. There were many



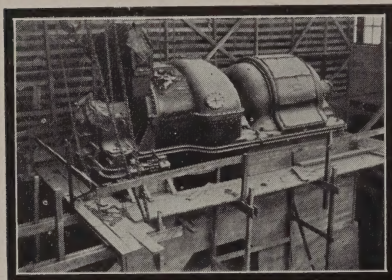
The Late Israel H. Sternberg

beautiful floral tributes, among which were pieces from Charles H. Tenney & Co., Mr. and Mrs. A. B. Tenney, Suburban Gas & Electric Club, Haverhill Street Railway Co., lady clerks of the Suburban Gas & Electric Co. Brief services were held at the grave at Lowell and the body was accompanied from Revere by the pall bearers.

CONSTRUCTION WORK AT THE SALEM ELECTRIC LIGHTING COMPANY'S PLANT

By Arthur J. Harty, Resident Engineer,
Charles H. Tenney & Co.

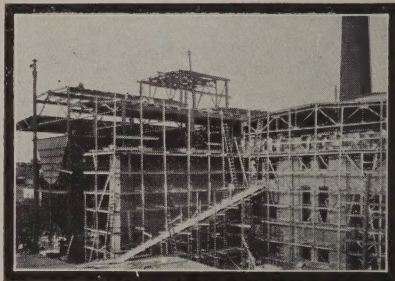
MARKED progress has been made on the construction work so that it can readily be viewed from the main streets of the city. The outside brickwork of the extension to our new engine room has been practically completed. The final cleaning down of the walls and removing of the stagings is under way and soon this part of our work will be completed. The interior work of piping up and testing out of the turbine will be started as soon as the piping and other material arrives.



Typical view of new 6250 KVA Turbine in position

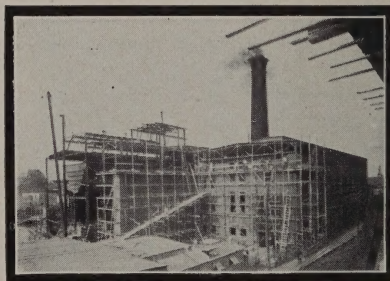
Picture No. 1 shows a view of the new 6250 KVA Turbo-Generator in position. This view was taken on September 1, 1915, before the brick walls of the engine room were roof high. In this picture, a good idea of the screen is shown which was placed between the old and the new work to keep out as much as was possible the dust and dirt, not only from the construction work, but also from the street. It has served its value in many ways, even though at times some inconvenience was caused through the heavy winds that we have had in the last few weeks. We

are at present building up the final partition wall between the engine room and the boiler room, and as soon as this is completed and the



View from roof of Superintendent's office, showing brick work of extension nearing completion

windows placed in this extension to our engine room, we will have covered in and completed all that is to be done so that the operating end of the station will not be troubled any further from dust or dirt. In pouring the floor of this extension we



View looking northeasterly at entire construction

encountered two springs and it was with difficulty that we were able to seal these off so that we would have a waterproof floor. The method we

found to be best to obtain this result was as follows: Digging a sump hole so as to drain all the water from the springs into one place. We then placed 2" pipes in concrete in each of these spring holes; caulking them so that no leaks would appear around the pipes. We then threaded the pipes on a level with the top of the mat, and as soon as we were assured that the water oozed through each of these pipes we capped same with a plug, cementing over and around each pipe. We have had no trouble or any show of a leak in this floor since this has been done.

Picture No. 2 shows a view of the west wall of the engine room addi-



View from Lafayette Street. Roof not poured on boiler room

tion and the south wall of our boiler room addition. You will note on top of the roof of the boiler room, in about the middle of the picture, the steel work in process of erection on which our new steel stack will be erected.

Picture No. 3 gives a typical view of the construction work on our two additions. This view was taken from the roof of a building now being erected on the south side of Peabody street, opposite our station.

Picture No. 4 shows a view looking from Lafayette street and gives a good idea of the roof over our boiler room. In the left of the picture you will note the tubes and drums of some of the new boilers

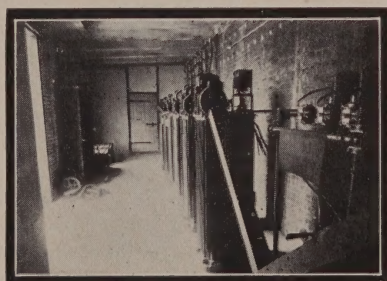
erected in position. The framework of this roof has since had the concrete poured on same and this gives us a little better protection from the weather for the work that is being



Switchboard room, showing new board in position and part of old board

done inside. The 48" discharge pipe from our condenser has been started in this addition and at present we have two lengths placed from the well.

This pipe will connect with our outlet to the river laid during the first months of construction referred to in our July issue. This pipe will not be connected until we have placed the new boiler in commission which has been erected in the old



View showing regulators in new room in switchboard room extension

boiler room, for it has to pass under an old boiler which is at present used for emergency purposes. The new boiler referred to above has

been tested out and has been completed so far as the bricking up is concerned—all that is remaining is the final steam and flue connections.

We have also made a good showing on the other boilers in the new extension. The foundation for one of these has been poured and the erection of stoker and fronts for same is now going on.

In our transformer room, the addition to our switchboard room, we have had the walls and ceilings painted a coat of flat white, preparatory to having the final coating of enameled white added. It has been decided to paint all the structures in this addition a dark green and also a border of the same color around the floors, which will give a baseboard effect around the rooms.

Picture No. 5 shows a view of the new switchboard and the remaining parts of the old. The new board takes up about half the space which the old one occupied.

Picture No. 6 shows a view of our new regulator room with regulators in place. On the right hand end of the picture, a view of our new electrolytic lightning arrester may be seen which was set temporarily to pro-

tect the station from the severe electric disturbances which occur quite frequently.

The Johnsberg Company who have been erecting our new cell structures in the basement of the switchboard room, have completed their work and the outlook is now very encouraging for a greater improvement in the installation in conjunction with the wiring up of our new switchboard apparatus.

The contract for the grille work around our new busses and turbine leads, which run under and are supported to our engine room floor, has been let, and the work of this feature will be started at once.

All the installation at the Naumkeag Mills has been completed and at any time that they are ready to have the power turned on we are in a position to do so.

Summing up, we would say that the outlook seems to be that all outdoor construction work will either be completed, or nearly so, on or before October 20th, and the indoor work can then proceed to greater advantage by being protected from the weather.

TRAP SHOOTING AT NIGHT

By Cyrus Barnes, Appliance Manager,
Malden Electric Co.

RECENTLY we have been called upon to install at the Pale Face Gun Club at Wellington a sufficient amount of light to enable the gunners to shoot by artificial light. An installation of this kind is something entirely new and is rather difficult to accomplish without making experiments.

The trap is located about 16 yards from the shooting squad. Clay

pigeons are thrown from the trap house at an angle up to 45° and at a height of about 30 feet and a distance of about 50 yards, and they can be readily seen. A large volume of light is necessary in order that the gunners may see these moving objects clearly enough to shoot.

The clay pigeons are saucer shaped and about five inches in diameter and one inch deep. We experiment-

ed with several different colored pigeons, but found white the most satisfactory.

For the illumination we have installed in the trap house two 1500 Type C lamps and two 750 watt Type C lamps with Holophane shades Bel-1000. These seem to give sufficient amount of light for illumination.

For lighting the gunners, or firing squad which consists of five men we have set two short posts connected with a wire which crosses overhead at a point about six inches in front of the gunners. Suspended from this each man has an individual light consisting of a 40 watt tungsten lamp with a Holophane angle reflector. This gives a sufficient amount

gives a detailed description of the proper installation for trap shooting at night.

After experimenting several nights, putting the reflectors at different angles until they were properly adjusted it was decided to hold a preliminary shoot. Following is the result of the shoot.

44	out of 50
41	" " "
36	" " "
35	" " "
34	" " "
31	" " "
23	" " "
22	" " 40
24	" " 30

There were about 30 people present, all more or less interested in



Trap-house showing illumination

of light to throw its ray along the gun barrels and sights.

To connect the lights for the gunners we run overhead from the club house. To connect lights for the trap we run underground cable in conduit from the club house. All of the lights are controlled inside of the club house. The print shown

this kind of sport and everyone seemed to be very much impressed with its success.

I have since heard that the Du Pont Powder Company have been planning a campaign to introduce night shooting, and without doubt the effects of it will be felt in a very short time.

THE RELATION OF THE CONTRACTOR TO THE CENTRAL STATION

Read by C. R. Hayes, Before New England Electrical Convention,
Springfield, Mass., Sept. 22, 23, 1915

Mr. Chairman and Gentlemen of the Convention:—

I HAVE been asked to present to this assembly of electrical men the central station point of view of "The Relation of the Contractor to the Central Station."

It has been my good fortune and pleasure to participate in the joint discussion of matters of mutual interest by representatives of the central stations of Massachusetts and representatives of your association.

At the very outset of this series of committee meetings it was apparent that "progress" was the result sought and the expressed desire of every one.

You can judge that a good start has been made. We have been able to agree upon a number of points and a joint report has been submitted by this committee to the N. E. Section of the N. E. L. A. at their recent convention at Kineo, Maine, and also to your association at this convention.

Let me say that a noticeable feature of the deliberations of the joint committee was the willingness on the part of every man to discuss the proposition under consideration more particularly to ascertain the other man's point of view than to argue that he perhaps was the only one who could be right.

We central station men are busy with our problems and you men are busy with yours. We perhaps some times get the idea that you fellows don't care what kind of a hole you get us into with our customers. You perhaps some times get the idea that we fellows don't care whether you make a cent or not just so long as

we keep adding to our list of customers.

Business is generally conducted on a fairly high plane today and you know just as well as we do that the central station industry is leading the way in dealing fairly with its customers—the public.

You know too that the controlling interests of these public service companies will not tolerate an attitude on the part of any of their representatives that does not serve to increase the prestige and standing of the company in every way in the eyes of its customers and others who have relations of whatever nature with it.

Yes, we believe, I feel sure, that you men have a pretty fair idea of the way we are trying to do business and serve our customers.

Now, you too will concede that we have a fair conception of what you are up against. We know you have your overhead expenses and we know that you pay your help good wages and that satisfactory show rooms cost something every month for rent. And also that the only profit you make is on each transaction and that your customer does not pay you a good substantial bill every month. Yes, we also know that you are up against the competition of some other contractor heretofore perhaps of the "carpet bag" or "curbstone" variety.

Further than all this we know that some central stations are doing what you electrical contractors believe should not be done. Some central stations maintain elaborate show rooms and sell appliances and lamps and do wiring work and for all I

know install bell wiring and private telephone systems.

Again some central stations are very well behaved and maintain a pleasant convenient office where bills are made out and other incidental business is transacted and customers stop in every month and pay their bills.

In some cities and towns there are several electrical contractors and if they are live ones and if the central station is alive to its opportunities and is more concerned about the future than the past, we can usually find satisfactory conditions viewed from either angle.

We have a few large central stations that have found it necessary to standardize their methods and systematize their routine work. We have again small plants operated and managed by one man almost and he gets into the work of every department from soliciting to meter testing.

There really seems to be a variety of conditions and one really feels that that which is all right in one case is all wrong in another.

We find ourselves advocating house wiring for \$19 in one case and in another keep our hands off. I doubt if any set rule can be followed in every case.

Now—it must be conceded that you contractors will grow and prosper to a greater extent where you are located in a territory served by a live, progressive company with broad, liberal and consistent policies. In such a community several perhaps will be influenced to get into the contracting business. After they get well established it is a fact that naturally many new customers are gained for the central station, due entirely to the efforts of the contractor. This all came about not because the contractor wished to add a new customer to the electric company's lines, but because the only

way the contractor could make a profit was to do a good turn to the company, that is, add another customer or make a better one for the company by increasing his equipment, incidentally getting his profit.

Is it unreasonable for the central station man to feel that you really are serving yourself rather than helping him?

If you think otherwise, look just for a moment on another proposition that may look all right too.

Consider the customer who feels he is doing only a favor to the electric company when he snaps a light on or starts a motor. It almost gives him a pain to think of all the profit that is going to the company.

Yes, it is perhaps a fact that the scheme of things is such that just because he needs our product that we are able to make a profit. On the other hand, if we didn't get that profit he could not get the required service because we wouldn't be doing business.

Now then—if we didn't get that customer due to your efforts we would be out of a job and you would be in some other kind of a business. So I guess it will have to be "you scratch me and I'll scratch you."

We want you to prosper and I know you want us to prosper. There is a great mutuality of interests. If you, in adopting certain policies injure the interests of the central station you certainly can not fail to injure yourself.

The central station, gentleman, is a fundamental factor. It is the basic cause, if you will but admit it, of your very existence. Without the activities of the central station interests you would have little need of such conventions as this today.

I urge you therefore, not to feel too strongly that there is something due you as recompense from the central station for the business turned into them.

The central station industry has not grown in a day. Its problems are being solved not on the hit-or-miss plan, but in the light of the experience of many years. Its rates and schedules are the result of the evolution of conditions which are still constantly changing. We have an industry that is on a sound basis and is not of a speculative nature. The policies that are adopted will not often be of a revolutionary nature. They will, I believe, be such that will tend toward progress.

You men here today are identified with this progress. You are contributing to it and you are a part of it. You do not have to come here deter-

mined to fight for your very existence. The progress and prosperity of the electrical industry as a whole assures you that your reward is certain.

We can, however, sit down and talk over matters of mutual concern. You are big enough and broad enough and we are keen enough to know that there is a broad common ground on which rests our joint success.

We are, I feel, all headed in the right direction, local differences will appear, but underlying it all the trend of the times is distinctly for co-operation and progress.

FREE LAMP RENEWALS. WHY?

By E. A. Harris, Office Manager,
Malden Electric Company

THIS company gives to its customers without charge the first installation of Gem lamps and also renews these free if they burn out or become dim.

Our commercial incandescent lamp expense amounts to \$10,000 annually. Why is this expense necessary now? Gas companies, in order to do business, do not find it necessary to give away mantles or burners, neither does the grocer make a practice of giving a new family their first set of dishes or replace them when broken.

In the early days of the electrical business (so they tell us) it was absolutely necessary that the lighting companies control the lamp situation because of the many different lamps manufactured and sold that were of such poor quality that the complaints of poor service, dim lamps, required so much attention. To prevent this

and also voltage variation, it was economy for the central station to give away and maintain standard lamps. This at once remedied the troubles experienced and such conditions have practically passed away.

It is worth considering, I think, now that Tungsten lamps are so well introduced, on discontinuing the practice of free installation and the renewals of Gem lamps. This can successfully be brought about by a small reduction to our customers in our selling prices of Tungsten lamps.

While we could practically do away with incandescent lamp expense, we would lose considerable revenue if Gem lamps were not used in our territory, but the service which we rendered would offset this and be far superior with Tungsten lamps more generally used.

THE COLLECTION OF ACCOUNTS

By Thomas F. Dickson,
Malden & Melrose Gas Light Co.

THE methods used by the Malden & Melrose Gas Light Company in "Collection of Accounts" are arrived at the highest standards.

The word "collecting" means but little to a great many, but to a collector it means a great many things, and to a corporation doing a credit business on practically 100% basis, it means that a great responsibility is placed with a collector, whose duty it is to deal with the delinquents.

The qualifications necessary for a collector are: Tact, personal appearance and the ability to govern himself according to the different circumstances with which he is confronted. He should never lose sight of the fact that it is his duty to collect the account.

It must be remembered that a method that works well with one delinquent is liable to be useless with another, therefore, a collector

has to use tact in approaching a debtor.

Among the different accounts, we find the prepayment meter robbery, which is some times difficult to handle to the satisfaction of the customer. In the last five years we have had a great many such charges, but with hard work and untiring effort we have brought them down to a minimum.

It is quite necessary for a collector to always keep his promise. The majority of debtors receiving their first call from a collector promise to make a settlement within a week or ten days, therefore, it is up to the collector to keep his promise to call on said party at the appointed time. If, however, he neglects making the call, the debtor has an excuse for further time. Therefore, to make a successful collector one has to keep his appointment and be on the job all the time.

TWENTY-FIVE THOUSAND CUBIC FOOT GAS HOLDER

By George S. Barnes,
Malden & Melrose Gas Light Co.

THE Citizens Gas Light Company of Stoneham, Reading and Wakefield contracted with the Davis & Farnum Company of Waltham, in December, 1894, for the purchase of a 25,000 cubic foot holder. This holder was of the mast type, of which this company built only four and to their knowledge there were no other holders of this type built, it having a three-inch cast iron mast extending from the bottom of the tank to the height of the inflated cup where it is trust from the collar

to the eight guide frame column. To prevent the cup from spinning in the wind, there is a shear type stop, or brace, extended from the cup to one of the guide columns.

This holder remained in commission after Charles H. Tenney & Company took charge of this plant until the 12" trunk line was laid from Melrose and has been out of commission now for about two years. Recently, however, we found it necessary to inflate this holder and use it as an auxiliary on our peak loads.

The original pressure of this holder, the cup of which is 40 feet in diameter, threw only three and two-tenths inches water head pressure, therefore, we found it necessary to weight the same until it gave a four-inch pressure. Not having the iron rails available for this purpose, we used 18 lengths of six-inch cast iron pipe, the total weight of which was 6,786 pounds.

The testing for leakage and necessary weight for this was accomplished by filling the cup with air. One 10-inch pipe served us both an inlet and outlet to our distribution

system and other local piping conditions being such, we did not feel confident in trusting to the one valve on this line, therefore, we cut off and plugged the outlet pipe to prevent any air from leaking by into our mains and on completion of this test, we reconnected this line after the air had been displaced from the holder.

The bell ends of the pipe facing toward the outer edge of the holder suggest to the passersby a turret of mounted guns and have been the brunt of a good many jokes.



What the Papers Say About Us

EDITORIAL

(From the Malden News, September 25, 1915)

NO CITY wants to resort to contract labor to do its public work. Yet there is no question but that all of the street and sewer work of any city could be done at far less expense and far more efficiently than if done by the municipality. The contracting firm is a business institution, while the city is a political one. A contracting firm has just been digging a trench and laying a conduit for electric light wires near our office. We'll venture to say it was done twice as quickly, twice as efficiently and half as expensively as the city could do the work. Only

able bodied men were on the job and they didn't loaf on it either. Little by little the work on our streets, especially new construction is being let out to contractors. It is to be regretted the municipal street department cannot do it as cheaply and as well, but their incompetency is generally admitted. We are sorry that every dollar that goes to these out of town contractors cannot be paid to local laborers and it would be if they could accomplish anywhere near the same results which they would if properly disciplined and organized.

ELECTRIC SIGNS

(From the Haverhill Record, Sept. 12, 1915)

THE electric advertising sign, properly placed and bonded to protect the city against accident, is an asset to any community. New York and other progressive cities have found it so, and as its use spreads across the continent, other cities are extending to it a hearty welcome. It is a product of new business, developed by clever men and made a thing of beauty and interest as well as usefulness, and none of those objections which are urged against the heavy and often hideous unlighted signs now prevail against it. In the first place, to be profitable it must be beautiful. In the second place, to operate successfully it must be substantially built and hung; and finally, to give full return for its cost, it must give the maximum amount of light. The mere

fact that these signs must naturally extend out over the sidewalk, should not banish them altogether.

Well lighted business streets are an asset to any town. Attractive streets entice the public to store windows where displays of goods create desires that build trade. These signs not only furnish a big volume of light, but they make business streets attractive. These impress the visitor in town or the stranger passing through that the town is alive, and in many ways speak a good word for the town. In the extra amount of light they give, they are also an asset to those who live nearby, as well as to the city. Why, then, should they be discouraged unless there are equally important disadvantages arising from their use? We cannot see.

MITCHELL AND BALL ENROLLED

Well Known Local Business Men Going to Plattsburg Military Camp
(From the Haverhill Gazette, Sept. 1, 1915)

HAVERHILL is to be represented at the third military training camp at Plattsburg N. Y., by Manager F. L. Ball of the Haverhill Electric Co. and Advertising Manager Tom W. Mitchell of Mitchell & Co., Inc. These two young men have had the training under consideration for some time and a short time ago made application and yesterday received word that their application had been approved and that they will be expected to report to Captain Gordon Johnston of the 11th cavalry at Plattsburg on Sept. 8. The camp opens that day and continues through Oct. 6.

Others have thought of making application, but Messrs. Ball and Mitchell are the only two men from Haverhill known to be actually preparing for the trip. Mr. Ball has been taking five mile hikes before breakfast for several weeks getting into

shape for the grilling he expects to receive in the hands of the regular army officers. He has been hunting every year and has always been more or less interested in athletics of one kind or another so he feels that he will be able to get into shape for training which is intended to equip business men to become officers should need arise.

The two local young men will leave Tuesday night and go to Rutland and cross Lake Champlain to the camp. A. B. Tenney, one of the leading officials of the Tenney Service Corporation, which controls the Haverhill Electric Co., was among those enrolled for the first camp during August along with a number of the Tenney Service employees and was very much pleased to have others of his men enroll for the September camp.

MALDEN MEN OFF FOR PLATTSBURG CAMP

Theodore Edw. Burleigh of Oak Ter., Gen. Mgr. Paige of Gas Co. and Arthur S. Hall and F. L. Ball, will study Army Tactics

(From the Malden News, Sept. 7, 1915)

THEODORE Edward Burleigh, son of Charles B. Burleigh, 11 Oak terrace, who has had four years training at the Peekskill military school, and General Manager Paige of the gas company leave this evening for Plattsburg, N. Y., where they will join the second camp of college men in training for military leadership, under the auspices of the United States government. Francis

L. Ball, superintendent of the Haverhill properties of the Tenney Co. and Arthur S. Hall of the Springfield plant of the Tenney Co., both formerly of Malden, will also be in the party.

Messrs. Paige, Hall and Ball will pay particular attention to machine gun practice in which they are greatly interested. All will be absent about 30 days.

NATIONAL GAS LIGHTING WEEK

Local Gas Company to Observe it by Demonstrating its Service to Improve Operation of Gas Burners

(From the Springfield Republican, Sept. 26, 1915)

ONE of the most important features of national gas lighting week, which will be observed by practically every gas company in the country during the week of September 27 to October 2, is the invitation of the local gas company to all consumers to make full and free use of its service in insuring the satisfactory operation of gas lights. This free service is not new, nor is it for one week only, but lighting week is believed to be a good time to bring it more forcibly to the attention of the public.

The gas company is desirous that every gas light in the city shall be always in good condition, because if it is not, it will not be used to the maximum extent, nor will the owner feel so kindly toward gas as he ought, all of which would mean a loss to the company. Therefore when the offer is made to clean and adjust lights free of charge it is not a case of giving something for nothing, but merely a good business

move which in the end makes money for the gas company. This form of service applies to all lights in residences and is thus somewhat different from the service given to the stores and factories, where for a small payment each month the company sends men at regular intervals to overhaul and adjust the lights, supply new mantles and broken glassware and make other needed repairs. In the case of service to residences, which is known as request maintenance, no charge is made unless new parts are required, in which case the parts only are charged for at the regular retail prices and the time of the men who do the work is free.

Many persons have hesitated to avail themselves of this gas company service, perhaps from modesty or uncertainty. The gas company wishes it known, however, that there is no string to its offer, but that the calls of representatives to inspect and adjust appliances are absolute-

ly free and that if any new parts are needed the representatives will give an estimate of the cost and will await the consumer's decision as to whether the work shall be done. With these facts kept clearly in mind, it is hoped that thousands of consumers in the city, during lighting week will notify the company if their gas lights are in need of attention, but with the understanding that at any time in the year this same service is available.

In some cases a gas light does not burn properly, because a little dirt in the burner interferes with the proper flow of gas. In other cases the burner has become carbonized and the same result is found. Again there may be some slight fault in the adjustment which interferes with securing a good light. To one unfamiliar with the gas light these troubles may seem difficult to overcome, but to the trained employees

of the company it is only a question of a few minutes to set everything in order and insure perfect illumination in the home.

Another feature of this free service is the delivering and installing without extra charge of mantles, glassware and other parts of lights bought at the gas office. When this is done a perfect result is always secured, whereas if the consumer himself attempted to place these parts on the lamps there would be danger of improper installation, whereby the consumer would lose in the efficiency of the light and the gas company, of course, would lose in patronage through having an imperfectly operating appliance in use. This free service does not apply to gas lamps alone; it is maintained and followed out in the entire operation of delivering gas whether to the lamp or any other burner.

ELECTRIC SHOW HERE

Local Company to Have Two Weeks' Exhibition
(From the Haverhill Evening Gazette, Sept. 11, 1915)

APPLIANCE Manager C. E. Haseltine of the Haverhill Electric Company announced today that the company will celebrate moving into its beautiful new quarters at 119 Merrimack street with a two weeks' electrical exposition, to which the people of Haverhill will be invited. The exposition will start Monday, September 13, and will be open daily from 10 a.m. to 5 p.m. until Saturday, September 25, 1915.

"Few people," said Mr. Haseltine to a Gazette reporter, "realize the extent to which recent inventions have done away with the drudgery and waste in the home, office and shop. The hundreds of Haverhill people who attended the great Boston Electric Show of 1912, will be amazed

at the strides which American inventive genius has made since then in the way of making electricity the servant of mankind.

"We propose to make Haverhill's Electric show as complete and instructive as money and effort can make it. All the latest inventions will be on exhibit in actual operation, together with educational displays, showing the old and modern ways of doing things. Electrically prepared refreshments will be served to visitors at all hours, and music rendered by electrical apparatus, will enliven the occasion.

"We sincerely hope that Haverhill people will accept our cordial invitation to call on us during the ex-

hibition, and it will be our effort to make the occasion of interest and value to all."

Plans for the show have been in

preparation for a long time and it is believed that every possible effort has been expended to make the affair the big success which it should be.

LEVIN J. CHASE ELECTED PRESIDENT

(From the Concord Daily Patriot, Sept. 10, 1915)

"Levin J. Chase was elected president of the Concord Board of Trade, last night, at one of the largest attended and most enthusiastic meetings in the history of the organization. Plans to make the board even a greater factor in the uplifting of the city's prosperity and general well-being, were discussed and it is the purpose of the board, under the guidance of President Chase with the able assistance of Secretary William W. Thayer, to institute a systematic campaign to that end.

"The attendance last night was so large that the limited quarters of the board were inadequate and the new officers were authorized to make arrangements for additional rooms. The large attendance was particularly gratifying, because of the extremely hot weather, and it was taken as a happy augury that the board has a serious purpose to advance the interests of the city. President Chase assured the members that he would give the best that is in him to promote the welfare of the city and make the board a material asset in every movement for civic or moral improvement."

In this connection we clip the following editorial from the Patriot of same date:

"The action of the Concord board of trade in electing to its presidency

Mr. Levin J. Chase cannot be too highly commended. He is certainly the 'right man in the right place' and it is exceedingly fortunate for business interests in the Capital city that a man in whom is combined so many admirable qualifications could be found and who would consent to take upon himself the important and oftentimes perplexing duties of the position which, it is understood, he will immediately assume.

"In his record as a citizen and manager of large and very important public and private affairs is furnished a most satisfactory earnest of the success which will follow his activities in the administration of the affairs of the office which he has been chosen to fill. Mr. Chase needs no introduction to Concord people, for his record is ample guarantee that there will be no slumberous periods in the work of advancing municipal interests, of which the board which he heads is the promotor and conservator.

"It is altogether an ideal choice for President Chase is in every sense a progressive, wise, sagacious and most efficient gentleman, equipped by nature and education to meet and successfully handle any and all the various emergencies which may arise."

TENNEYGRAMS



EXETER AND HAMPTON ELECTRIC CO.

Miss Bessie M. Whyte, Correspondent

Office Manager H. E. Blaisdell spent his vacation in Canada.

Among our latest installations is the power and lighting service for the new Phillips Exeter Academy building, erected to replace the main hall destroyed by fire a year ago. The edifice is a model of architectural beauty, and the lighting effect magnificent.

Under the direction of a newly organized Board of Trade, Hampton Beach held a very successful carnival week, Labor day and the week following. Immense crowds enjoyed the many attractions. A feature of the carnival was the decorative street lighting under the direction of Superintendent C. B. Edgerly. We installed over 1,000 colored lights, and the beach merchants were much pleased with the effect, and are now planning to have them next year during the whole season.

On September 23rd Hampton Beach was the scene of a disastrous fire which threatened to wipe out the entire water front. With the same spirit and enthusiasm that made carnival week a success, the residents fought to save their summer homes; although about 57 build-

ings were burned before the fire could be checked. Superintendent Edgerly and his speed boys restored the electric service with unbelievable swiftness, although we lost many poles, crossarms, transformers and wire, the service was restored within 24 hours. While the fire was raging, Tenney Service boys saved 35 meters.

The high winds of September 26th have taken down many a limb from our shade trees, and all trouble to lines has been quickly repaired without interruption of service.

HAVERHILL ELECTRIC CO.

Thomas D. Bond, Correspondent

Manager F. L. Ball and Tom Mitchell, a Merrimack street merchant, are receiving military training at Plattsburg, N. Y. They left Tuesday, September 7th, and return October 6th. About October 7th, the office will probably be run under military regime. The door will be opened to the public at the sound of "reveille."

A man came in and tried to pay us his poll tax the other day. Said he thought that our building looked as if it were a city edifice.

A new floor has been laid in the entrance to the stock room. General Bliss, take notice. There is some

talk of building a large veranda over the garage, with a door leading from our club room. This would make an ideal place to hold club dances, etc., as it overlooks the river.

The distribution department has painted all the transformers, arms, etc., on our poles. This goes to make our lines more sightly to the public and to longevity in life.

We are pleased to learn that a Cadillac auto truck has been added to our line department. It fills a long left want. W. W. Byars is in charge.

Check Takes Interesting Travels

Made out to the New England Tel. & Tel. Co., returned to sender by New England Tel. & Tel. Co. for signature. Sender, by mistake, sends it to the gas company in payment of a bill. The gas company, not reading it carefully, sends it to us; we return it to the New England Tel. & Tel. Co.

A new theatre, known as "The Strand," has just been completed. The electrical equipment consists of a Fort Wayne motor generator set for the movies, an electric organ instead of orchestra, and a large 600-light sign. This is of the flasher type. The entrance is illuminated by studded lamps in concealed sockets. These are of the round bulb, all frosted type and give a very pleasing effect. The lobby is illuminated by semi-indirect bowles with 300-watt Type "C" lamps.

The R. C. Maxwell Company of New York have installed six 100-watt lamps over a sign at 18 Water street. These are on a time switch set to turn the lights off at 11.15 p.m.

The City Council are beginning to see the electrically lighted signs are

a great help to the city as advertising and street illumination. Editorials in the papers have helped this matter a great deal.

The Stephen E. Gale Hospital, Main street, is finished. They have a 7½ H.P. motor on elevators and about 300 Mazda lamps.

Two Magnetite arcs have been placed on Emerson street.

Superintendent James E. Frank and family spent their vacation at Lake Pentucket, Georgetown.

PEOPLES GAS & ELECTRIC CO.

L. W. Bradley, Correspondent

Reduction in the price of coke has started a campaign, which ought to relieve our congested yard; giving us much needed storage capacity.

Let it be known L. B. Stewart, faithful storekeeper, had a much needed vacation at Mexico. I have just been informed that Lory made the trip in Jimmie Hurley's good ship "Friedcake." It is interesting to know that after covering one fifth of the distance, our husky storekeeper ran out of gasoline, and rather than come back and give the crowd a laugh, he settled down to seven long hours rowing.

Meter reader, A. Dudley Morris, has accepted a position as station agent with the New York Central Railroad Company at Woolcot, N. Y.

Henry Schultz, a local boy, will have the position left vacant. If he is as active and efficient as his predecessor, "He will fill the Bill."

The Coke Campaign started September 1st, is beginning to show signs of a "howling success," much

to the satisfaction of the gas works—where storage capacity is limited.

E. S. Bliss, manager of the Springfield Gas Light Company is spending a couple of weeks with us in looking over the grounds for large installations of gas appliances.

ROCKLAND LIGHT & POWER COMPANY

T. F. Odell, Correspondent

It has been decided to form an Employees Club at this company and the Executive Officers have authorized the necessary expenditures. The old Eagle Hotel on Broadway, near our office, is to be utilized for this purpose. Three rooms on the first floor will be renovated and furnished and will provide a very comfortable home for the club. A great deal of interest has been aroused and many of the men have offered to help in getting the rooms ready for use. We expect soon to have a large army of volunteer painters, wiremen, steam fitters and plumbers on the job.

Manager E. C. Peebles was recently laid up by an attack of malaria.

Frank Frae, inspector and trimmer of street arcs, while at his work recently was severely cut by the breaking of an arc lamp globe. The artery in his left wrist was severed and some of the tendons so badly cut that it was feared he would lose the use of some of his fingers. Through careful surgical treatment he was able to avoid permanent injury and is now again about his duties.

Changes have been made in the Haverstraw Sub-station so that it may be properly heated in winter. In the future Dudley can make out his report without wearing mittens.

Robert H. Drummond who has been connected with the new business department for the past six years, severed his connection with the Company on October 1st. We are sorry to lose him but wish him all success in his new venture.

We have recently completed the extension of our lines on the Haverstraw and Viola road, Suffern, N. Y., which will increase our yearly revenue about \$1,200.00.

We are about to commence an extension of our lines into the Borough of Oakland, New Jersey. This extension will give us an increase of about fifty customers and also add thirty lamps to our street lighting circuits. In another year we expect an order for about thirty more street lamps. Before it was decided to make this extension the Borough officials had about decided to have a municipal plant, building their own pole line and purchasing current wholesale from the Borough of Pompton Lakes who have a municipal plant now in operation.

MALDEN ELECTRIC COMPANY

H. K. Brown, Correspondent.

The first meeting of the year of the Local Employees' Club was held September 28th. About seventy-five were present. The officers for the new year were elected as follows:—President, J. T. Day; vice-president, Geo. F. Heustis; treasurer, E. A. Harris; secretary, H. J. Walton. Executive committee, Messrs. Brown, Griman, Hawkes, Richardson and Murphy.

A very fine moving picture exhibition was given by Mechanician Brown, showing Biograph, Keystone, Kalem and Pathe Weekly Films.

The Employees Relief Association held their meeting on the same evening as the Local Club meeting. Plans were completed and campaign outlined for the sale of the tickets to the fifth annual ball which will be held at Davis Hall, October 11th.

A. F. Sawtelle, was elected to the Board of Trustees to succeed A. E. Trudo, who has resigned.

The meter department have installed 344 meters for the month to September 27. The net gain to this date being 222, which is some gain.

William Easson, switchboard operator, who was badly injured by a fall resulting from heat prostration, has recovered after a month's illness and is back at work.

Miss Gertrude M. Thibodeau, of General Bliss' staff, is taking eight-mile daily hikes at Camp Jaffreys, N. H., where she is training for the November election.

The Vahey Fault Finder has been installed at our electric station, and during the recent windstorm it proved of great value in discovering open circuits and grounds on our lines.

SPRINGFIELD GAS LIGHT CO.

Lloyd A. Galbraith, Correspondent

President C. H. Tenney and Mrs. Tenney spent a short vacation at Maplewood, New Hampshire. Mr. Tenney, it is reported, enjoyed his favorite game with a number of other golf enthusiasts from Springfield

Mr. and Mrs. Bradley and Mr. and Mrs. Belcher, started to motor to Oswego over the recent holiday but, when they were as far on their journey as Utica, Mr. Belcher had the

misfortune to break his right arm while cranking his car. Mr. Belcher was taking a short vacation at the time and had arranged to spend most of it motoring, but his plans in this direction have been changed on account of the accident. Mr. and Mrs. Bradley went on to Oswego by train and enjoyed a short visit with their son Leon.

Mr. Hall, superintendent, has "joined the army" at Plattsburg. He has had previous experience in army life and from what we hear is enjoying himself in the citizens' camp.

Mr. Burgi, returned to Springfield Thursday, September 9th, after a cruise on the "Emilie S" down the Connecticut to the Sound. While the yacht was at the Sound it was placed in dry-dock and the bottom was scrapped and painted.

Our high pressure extension to the Connecticut state line to supply the Northern Connecticut Light & Power Company with gas to be distributed by them to Thompsonville, Enfield, Windsor Locks and other Connecticut towns, has been connected in the town of West Springfield and completed about half its length through Agawam. The Springfield Navigation Company has completed the work of dredging the river bed at the point where the extension is to cross the Connecticut and is about ready to commence laying the pipe. The Town of Agawam through which the line is extended has never enjoyed gas service and our solicitors have been quite busy obtaining applications for connections and piping for the many homes along the line. Land sale promoters have awakened to the opportunity and their red flags and free street cars are quite noticeable as they offer Agawam suburban real estate with gas service.

SALEM ELECTRIC LIGHTING CO.

W. P. Verry, Correspondent

Mr. F. C. Tobin, one of our lighting solicitors, returned to his duties this month. Mr. Tobin has been ill since early in June, and all are glad to welcome him back again. His place was taken temporarily by Mr. Ernest Peabody at one time connected with our wiring department. Mr. Peabody has been quite successful in obtaining new customers.

Many new lighting contracts have been made by our solicitors in the power department, whose time has been divided between the two classes of business of late. This has been made possible by the use of one of the company's electric automobiles.

Every house but one, that has been built in Salem since June 1st, is being wired for electricity.

At the new addition to the weave shed of the Naumkeag Steam Cotton Co., new looms are being added daily. Their new spinning mill is also nearly completed, and the machinery is being rapidly installed. These additions are gradually increasing the daily demands for power from us.

Our new 6250 K. W. Cutris generator has arrived and been placed on its foundations. This turbine is the first one of its type to be placed in New England. Other companies nearby have orders in for similar machines.

The work of connecting our underground cables has been steadily going on under the direction of Mr. Harry Tounge of the firm of McGunigle & Tounge, who have the contract. On August 23rd the consumers on Peabody street were cut over onto the

underground, these being the first ones to be connected.

At the present time practically all of the cables are alive and about 2-3 of the services in the territory that will be finished this fall have been connected.

Donn D. Sargent Co. took the Vaughn factory, 405 Bridge street, in July. At that time the building, a new one, was just four bare walls. On September 1st, the company shipped its first lot of completed shoes, and was making shoes at the rate of 1800 pairs a day. During the month of August the company secured an equipment of machinery, provided power, supplied lasts, patterns and leather and organized a force of shoe makers.

This rapid work was largely due to their decision to use electric drive and to buy their current, our new business department getting in touch with the concern as soon as it was learned the factory had been leased, and doing their part in rushing the power end along.

At the present time, the connected load is 75 H.P. in motors, 200 lights and about 4 KW. in heating units.

This is about as rapid action in starting a new shoe manufacturing enterprise as is known.

SUBURBAN GAS & ELECTRIC CO.

Harry M. Frank, Correspondent

We have broken all records in Revere this year as to rain, heat, lightning, and last and most important, wedding among our employees. Miss Mae Better, our senior lady clerk is to be wedded to a young business man of Chelsea on October 3rd; Miss Mary Mulligan, our order clerk, to another Chelsea business man on October 24th; and Harry Tompkinson, foreman of our electric

meter department to a Revere young lady on September 22nd. Some record.

Mr. Frank Macaulay, teller, left Monday, September 14th for a sea trip to Prince Edward Island and return.

Supt. A. F. Gardella, spent two weeks vacation at his father's camp at Mountain View, N. H.

Manager C. F. Chisholm and Messrs. H. M. Frank and A. L. Gardella, represented the Company at the outing of the Winthrop Board of Trade

at Suntaug Lake, Wednesday, September 15th.

On Friday evening, September 11th, we held a special meeting of the Suburban Gas & Electric Club to listen to Mr. F. B. Mitchell of Landers, Frary & Clark of New Britain, Conn., who gave an illustrated talk on electric heating appliances. Notwithstanding the excessive heat, forty members of the club were present, and after extending Mr. Mitchell a rising vote of thanks, all agreed that the talk was one of the most interesting and instructive ever held at Revere.

A LESSON IN SERVICE

How Louis Hill Taught his Porters a Lesson

THERE are porters in the old shell of a union station at St. Paul who well recall Mr. Louis Hill's anger one day when an aged woman, poorly dressed and burdened with luggage, came into the place from an arriving train. The porters did not see her. They sometimes do not see her kind. But they saw Hill—the old man's son is a conspicuous figure in the Twin Cities. And they

saw the president of the Great Northern Railroad go across the concourse, pick up the woman's baggage and carry it after her until she had boarded a street car. After which he returned, and the standard color of "red-cap" porters in the big station became several shades lighter.

And when one thinks of tips and porters he must think of the Pullman service.

Charles H. Tenney & Co.

Managers and Engineers

American Tar Co., Boston, Mass.

Barre and Montpelier Traction and Power Co., Montpelier, Vt.

Concord Electric Co., Concord, N. H.

Consolidated Lighting Co., Montpelier, Vt.

Exeter and Hampton Electric Co., Exeter, N. H.

Exeter, Hampton and Amesbury Street Railway, Hampton, N. H.

Fitchburg Gas and Electric Light Co., Fitchburg, Mass.

Haverhill Electric Co., Haverhill, Mass.

Malden Electric Co., Malden, Mass.

Malden and Melrose Gas Light Co., Malden, Mass.

Peoples' Gas and Electric Co. of Oswego, N. Y.

Rockland Electric Co., Closter, N. J.

Rockland Light and Power Co., Nyack, N. Y.

Salem Electric Lighting Co., Salem, Mass.

Springfield Gas Light Co., Springfield, Mass.

Suburban Gas and Electric Co., Revere, Mass.

The Bristol and Plainville Tramway Co., Bristol, Conn.

TENNEY SERVICE ASSOCIATION

Officers, 1915-1916

C. E. PAIGE,
President.

C. R. HAYES,
Vice-President.

PALMER YORK,
Secretary.

W. H. BRADLEY, Chairman Committee
on Policy and Management.

C. F. CHISHOLM, Chairman Gas Appli-
ance Committee.

JOHN WEST, Chairman Electric Appli-
ance Committee.



